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ABSTRACT

In the fall of 1992, the National Association of Test Directors (NATD) surveyed its members on their involvement in the development of performance assessments and scoring rubrics. The extent to which members have developed performance assessments is reported, along with how they went about it, the advice they would offer others who are developing performance assessments, and the nature of the scoring rubrics they developed. About half of the 64 respondents had developed performance assessments, mostly in writing. Respondents recommend extensive teacher involvement and adequate time as essentials in the development process. A table summarizing the attributes of the scoring rubrics that respondents submitted is provided. In all, there are four tables of respondent replies, and three illustrative figures. (Author,SLD)

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Quantifying Quality

Results of the NATD Performance Assessment Survey

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Paper presented as part of the invited symposium "Objectifying the Subjective: Rubrics, Scoring Guides, and Other Ways of Knowing," presented at the Annual Meetings of the National Council on Measurement in Education and American Educational Research Association, Atlanta, Georgia, April 14, 1993.

Abstract

In fall 1992 the National Association of Test Directors (NATD) surveyed its members on their involvement in the development of performance assessments and scoring rubrics. The purpose of this paper is to examine the extent to which members have developed performance assessments, how they went about doing so, the advice they would offer others who are developing performance assessments, and the nature of the scoring rubrics they developed. About half the respondents had developed performance assessments, mostly in writing. They recommend extensive teacher involvement and adequate time as essential to the development process. A table summarizing the attributes of the scoring rubrics they submitted is provided.

Introduction

In fall 1992 the National Association of Test Directors (NATD) surveyed its members on their involvement in the development of performance assessments and scoring rubrics. Follow-up questionnaires were mailed and responses were received from 64 members, about a third of the total membership. The purpose of this paper is to examine the extent to which members have developed performance assessments, how they went about doing so, the advice they would offer others who are developing performance assessments, and the nature of the scoring rubrics they developed.

Who responded? How many have developed performance assessments?

About three-quarters of the respondents (49 of the 64, or 76.6%) are employed by local educational agencies (LEAs)¹. The remainder are divided among colleges and universities, educational service districts, state educational agencies (SEAs), consultants, and other types of organizations. Because of their diversity and small sample size of each of the non-LEA subgroups, most of the analyses will focus on either the entire group or on the LEA respondents. Of the LEA group, 21 of the 49 respondents represent school systems with an enrollment of more than 35,000². The enrollments of the districts represented range from 2,800 to 618,000.

[Insert Table 1 about here]

Table 1 gives a breakdowns by organizational affiliation of the respondents who have and have not developed performance assessments. Slightly fewer than half the respondents (43.8%) report that they have developed performance assessments. It's not clear how well that percentage generalizes to other NATD members, but the actual percentage may well be lower, if one assumes that people who have developed performance assessments are more likely than others to fill out a questionnaire with the heading "NATD Performance Assessment Survey."

Among the LEA respondents, 22 of the 49 (44.9%) have developed performance assessments. The rate differs little for large districts (42.9%) and smaller districts (46.4%).

In what subjects and for what grades have performance assessments been developed?

Writing is by far the area in which the greatest number of performance assessments are being developed (see Table 2). In fact, of the 28 members who had developed performance assessments, 24 had developed writing assessments. Reading and mathematics run a distant second and third. There was curiously little development reported in some of the areas that have

¹This percentage is near the proportion of all NATD members who work for LEAs. Of the members listed in the 1991 NATD directory (the most recent available), 74.9% listed an LEA as their primary affiliation.

²35,000 is the enrollment needed to qualify for membership in the Council of the Great City Schools. LEAs with an enrollment of 35,000 or greater will be considered "large" in subsequent analyses.

been widely regarded as lending themselves well to performance assessment: science, social studies, the fine arts, listening, speaking and foreign languages. This doesn't necessarily mean that performance assessments are not conducted in those areas, but it might indicate that development of such assessments is taking place at the school or classroom level (NATD members employed by LEAs are generally part of their district's central administration) or that schools are using assessments from other sources (e.g., state assessments, assessments purchased from publishers).

[Insert Table 2 about here]

Figure 1 gives frequencies and the mean number of subjects in which assessments were developed by LEAs. Of the 22 LEA respondents who developed performance assessments, 9 developed assessments in only one subject area and 8 developed assessments in two subjects. Just under one-fourth report developing assessments in three or more subjects. The average number of subjects was 0.94; considering only the respondents who had developed at least one performance assessment, the average number of subjects was 2.11.

[Insert Figure 1 about here]

The grade levels for which performance assessments are developed vary by subject area (see Figure 2). For the LEA respondents, most of the development in reading and all of the math is concentrated in grades K-3. Writing and speaking assessments are more evenly distributed across the grades.

[Insert Figure 2 about here]

Does school system size affect the number of performance assessments developed?

Table 3 shows the number and percentage of large and smaller school systems that have developed performance assessments. Performance assessments in at least one subject were developed by 42.9% of the larger systems (N = 21) and 46.4% of the smaller ones (N = 28). Although about the same proportion of large and smaller school systems developed math performance assessments, larger districts were more likely than smaller ones to have developed writing assessments and less likely to have developed reading assessments, though the differences were not statistically significant.

[Insert Table 3 about here]

Figure 1, which gives information on the number of subjects in which the respondents developed performance assessments, presents data for large and smaller school districts. The mean numbers of subject areas are almost identical for the two groups.

For LEAs, are performance assessments developed primarily at the classroom, school, or district level?

Twenty-one members affiliated with LEAs responded to this item. The classroom and district levels were cited with equal frequency (57.1%) as the primary locus for development of performance assessments. Development at the school level was mentioned only half as often

(28.6%). The only difference between large and small districts was that respondents from the smaller LEAs were more likely to say that the classroom was a primary locus of development. It is not clear whether less development is going on in the classrooms of large school systems or whether the respondents are less likely to know about such development in a very large school system.

Which LEA office or department has responsibility for developing performance assessments?

Of the 19 members who responded to this question, five indicated that the responsibility rested with testing, evaluation, and research staff and three cited curriculum and instruction. Eleven members said that responsibility was shared by the two offices.

What is the role of NATD members in the development of performance assessments?

Figure 3 summarizes members' responses to the question, "What is your role with respect to performance assessment (e.g., are you the primary developer, technical consultant, trainer, etc.)?" The most frequently mentioned role is that of technical consultant (73.9% of LEA respondents and 70.0% of all respondents). About a third of the respondents serve as a trainer, coordinator of performance assessment development or data gatherer/analyst/reporter. Other frequently mentioned roles were primary developer and developer. Here is a sampling of how members see their roles:

All of the above³ plus collaborator, broker for workshops and training sessions, etc. [*Educational Service District*]

All of the above. I am in charge of the development and also serve as a technical resource. (We have others, but they are outside consultants.) I also train teachers to use the assessment system. [*University-based assessment center that develops early childhood performance assessments*]

Supervise development of systemwide performance assessments; scan and report assessment results; serve as technical consultant to central and school staff; conduct inservice training on performance assessment and portfolio development for teachers and principals. [*LEA, 411,000 students*]

Oversee all administration of assessments in district; work with Curriculum Department to develop events/open-ended questions; be knowledgeable and oversee writing and math portfolios, alternative portfolios for Special Education and primary portfolios for K-3. [*LEA, 90,000 students*]

Technical consultant; coordinator of district efforts; district representative and curmudgeon to the state testing people. [*LEA, 65,000 students*]

³A not unexpected response from a testing director.

I beat the drum. Budget constraints severely impact our ability at present to pursue performance assessments; however, there is great enthusiasm in our schools. *[LEA, 44,076 students]*

Supervisor of area....[Another person, who has primary responsibility, is assisted by graduate students.] I guess I am mostly a cheerleader. *[LEA, 44,000 students]*

Conceptual leader, trainer and consultant. *[LEA, 31,000 students]*

Technical consultant....I also conduct all scoring training workshops for teachers. We have mentors assigned to me that are becoming "assessment trainers/experts." I help candidates write assessment projects each year. *[LEA, 20,000 students]*

I did the project with the assistance of teachers...[whom] I hired to write items. *[LEA, 18,000 students]*

We are beginning to adapt/develop performance assessments as part of our comprehensive evaluations. *[Non-profit organization engaged in program evaluation]*

How were assessments and rubrics developed?

Twenty-three members (20 from LEAs, 2 from SEAs, 1 from a college) described the process by which their performance assessments and rubrics were developed. Except for one LEA staffer whose school system purchased performance assessments from a publisher, the development process showed remarkable uniformity. Tasks and rubrics were generally developed by teachers or curriculum staff (or, much less frequently, by measurement specialists with input from those groups). Teachers were an integral part of the development process in nearly all cases. About a third of the LEAs reported that they adapted existing rubrics obtained from their states or other outside agencies. Many members reported a painstaking, iterative process of consensus building, reviews, pilots, analyses, and revisions. Some of their responses are given below:

Writing objectives were identified by English teachers. Prompts were written by committee of English teachers and field tested. Sample of field test papers was used by committee to draft preliminary scoring rubric. Prompts are refined for districtwide administration. A random sample of papers from a stratified random sample of schools is pulled and used to refine scoring rubric and prepare training packets for readers. *[LEA with 618,000 students, writing assessment at grades 7-12]*

Literature-Based Writing Process Assessment developed by teachers over the past four years. Revised rubric in 1990 to use a variation of the NWEA 6-trait 5-point rubric for writing. *[LEA with 32,000 students, writing assessment at grades 1-8]*

We recruited a large group (approximately 40 teachers and administrators) to design the assessments. After spending about half the school year in research and assessment training, we decided that the majority of our work initially would

focus on criteria writing. Tasks are more easily found, borrowed, or purchased from other sources. Deciding what to judge and what to look for in student work and behavior would be the most important first step. We decided that standards could only be set after the tasks and assessment are field-tested and validated, at which point the question of "how good is good enough?" can be addressed. [LEA with 32,000 students, writing and critical thinking assessments at grades 9-12]

One individual with content expertise for preliminary draft--reviewed and revised by all appropriate grade level instructors--final draft small committee. [LEA with 12,500 students, reading assessments at grades 1-6, writing assessments at grades 1-6 and 12]

Teachers developed them based on Texas essential elements and district objectives. They were piloted and revisions made. Instruction and assessment were combined. [LEA with 18,000 students, listening and speaking assessments at grades 1-6]

Committee of teachers at grades K-3: (1) researched into performance assessment and best practices currently being used; (2) established outcomes for primary mathematics; (3) selected tasks that validate these outcomes; (4) designed rubrics for scoring; (5) field tested and revised based on teacher comments. [LEA with 8,413 students, math assessments at grades 1-2]

How did NATD members investigate the technical quality of performance assessments?

Eighteen of those surveyed (62.1% of those developing performance assessments) indicated that they had investigated the reliability and/or validity of their assessments. Of the 14 respondents who gave specific descriptions of the studies they conducted, ten had measured interrater reliability. Validity studies were mentioned much less frequently. The ways of investigating validity included:

- comparison of scores with final course grades and a study of whether students enrolled in higher level courses scored higher [college]
- correlation with objective writing assessment [LEA]
- disaggregation of results by gender, ethnicity and language classification [LEA]
- multi-faceted analysis of ratings across task, rater and content using item response theory [SEA]
- gathering evidence recommended by Linn, Baker and Dunbar (1991)⁴ regarding consequences, generalizability, fairness, cognitive complexity, meaningfulness,

⁴Linn, R., Baker, E., & Dunbar, S. (1991). Complex, performance-based assessment: Expectations and validation criteria. *Educational Researcher*, 20(8), 15-21.

content quality and coverage, and cost justification. *[university-based assessment center constructing prekindergarten-grade 1 assessments]*

Is student performance tied to any significant consequences?

Except at the high school level, members report that performance assessments are generally low-stakes tests, at least from the student's point of view. Of the 18 LEA respondents, three said that students must currently pass a performance assessment in order to graduate, two reported that a similar requirement will be implemented soon and four indicated that passing a performance assessment was needed for certification of competency at a high school grade other than 12. Four members reported that performance assessments were used to determine placement into courses or special programs (e.g., remedial, gifted), three indicated that results will be linked to school accreditation, and two said that performance assessments were used in making promotion decisions.

What types of rubrics are used?

Nineteen members submitted one or more scoring rubrics, not all of which were developed by the member or his/her organization. Not surprisingly, most of the rubrics are for writing assessments. Of the writing rubrics, 15 were analytical (i.e., separate scores are assigned for specific features of the writing), four were holistic (i.e., there was a score for overall performance) and six used both analytical and holistic ratings. Only one member submitted writing rubrics that were prompt specific. Most of the other rubrics submitted were for assessments administered in the early elementary grades. These include tasks in a variety of subject areas, progress reports, journals and student self-assessments. The rubrics for writing, reading, mathematics, listening, speaking and science are described in Table 4.

[Insert Table 4 about here]

Which procedures have proven successful for developing assessment tasks and rubrics?

When asked what advice they would give to others who need to develop performance assessments, nearly all of the 20 respondents (all but two from LEAs) mentioned getting extensive teacher input and allowing enough time. Here are some of their comments:

Consider test development to be formative and subject to much revision. For the rubric: it is important to reach a consensus (but recognize that there will always be outliers!). *[college]*

Involve a broad base of teachers in the development of tasks and rubrics after "umbrella" district objectives and "standards" have been established. *[LEA, 618,000 students]*

Teacher input is critical. Allow enough time to pilot and revise as much as necessary. Keep rubrics simple--teachers seem to prefer fewer, more global ratings to a larger number of more detailed ones. A single performance assessment isn't going to provide all the information needed; use multiple

measures and consider combining performance assessments with more traditional measures. [LEA, 411,000 students]

Provide initial training for raters until they score reliably each time/session they work. (Even the best get "rusty.") [LEA, 55,000 students]

Don't re-invent the wheel; use a developed model and modify as necessary. Read the literature. Do involve the teachers as local readers; it definitely improves instruction. [LEA, 43,000 students]

Staff development activities and incentives/grants for developing tasks/rubrics for classroom or school use. [LEA, 32,000 students]

Need some form of staff development when involving teachers; requires administrative leadership. [LEA, 31,524 students]

Good training and discussion about the relevant dimensions and the range of scores is absolutely necessary to good performance assessment. Tasks seem to be relatively easier to create or adapt once the criteria are established (although the field-testing may show more problems with task selection than we anticipate!). A second hurdle to overcome is the conviction that performance assessments can provide a sufficient amount of information *by themselves* to document student learning, without evidence from additional, more traditional measures. Time and again teachers want to make decisions about students based upon one writing prompt, for example, in spite of evidence that the information is very narrow. One thing that helped this was gathering empirical evidence and showing teachers that the amount of error was very large when minimal amounts of data are used. [LEA, 24,000 students]

Top down doesn't work. Collaborative models are best. Teachers are motivated to find new assessments to support areas on our new report card. They have to feel confident when explaining scores/grades to parents. [LEA, 20,000 students]

Each teacher needs ownership and buy-in. Get input from everyone at some stage in the process, even if it's just a final "read and comment" request. [LEA, 18,000 students]

[1] Find balance between assessing via individual interviews and integrating with instruction. [2] Keep it teacher based; trust teachers. [3] Defining criteria is hardest and most rewarding task for teachers who participate. [4] Build consensus. [LEA, 14,000 students]

Teachers, time and district commitment of considerable financial resources needed. [LEA, 13,400 students]

Tests need lots of pilot time for review by people who actually administer them. [LEA, 12,500 students]

We have worked with groups of teachers who then sought input from their peers before finalizing. *[LEA, 5,500 students]*

Successful: Lots of involvement from teachers; repeated pilot studies and rounds of revisions (one or two isn't enough!). Unsuccessful: Trying to go too fast! This type of development takes at least twice as much time (and probably more) than development of traditional tests. Teacher training must be comprehensive and ongoing. *[university-based assessment center constructing prekindergarten-grade 1 assessments]*

Tasks must be clearly stated and must cover a wide range of abilities and skills; rubrics must be open enough to capture richness of student responses; scoring must represent clear rating scales. *[SEA]*

Discussion

It is clear that, while there is great interest in performance assessment, development activities (at least at a district-wide level) are not being carried out by most of the respondents and are hardly being carried out at all in subjects other than writing. The reasons for this are unclear; the cause may have to do with a lack of time or money; insufficient dissatisfaction among decision-makers with existing assessments; the feeling that performance assessments should not be imposed in schools in a "top-down" fashion; or the possibility that such development is being carried out at either the classroom or the state level. The survey only addressed the issue of whether performance assessments were being developed, not whether they were being used. In retrospect, it would have been better to ask whether performance assessment was being used, and, if not, then why not. It would also be interesting to know to what extent portfolios are being used (only a few respondents mentioned them) and the processes by which portfolios become valid and reliable measures.

Table 1
NATD Survey Respondents

Organizational affiliation	N responding	N who have developed performance assessments	N who have not developed performance assessments
College/university	6	2	4
Educational service district (ESD)	3	0	3
Local educational agency (LEA)	49	22	27
State educational agency (SEA)	2	2	0
Publisher	1	1	0
Other	3	1	2
Total	64	28 (43.75%)	36 (56.25%)

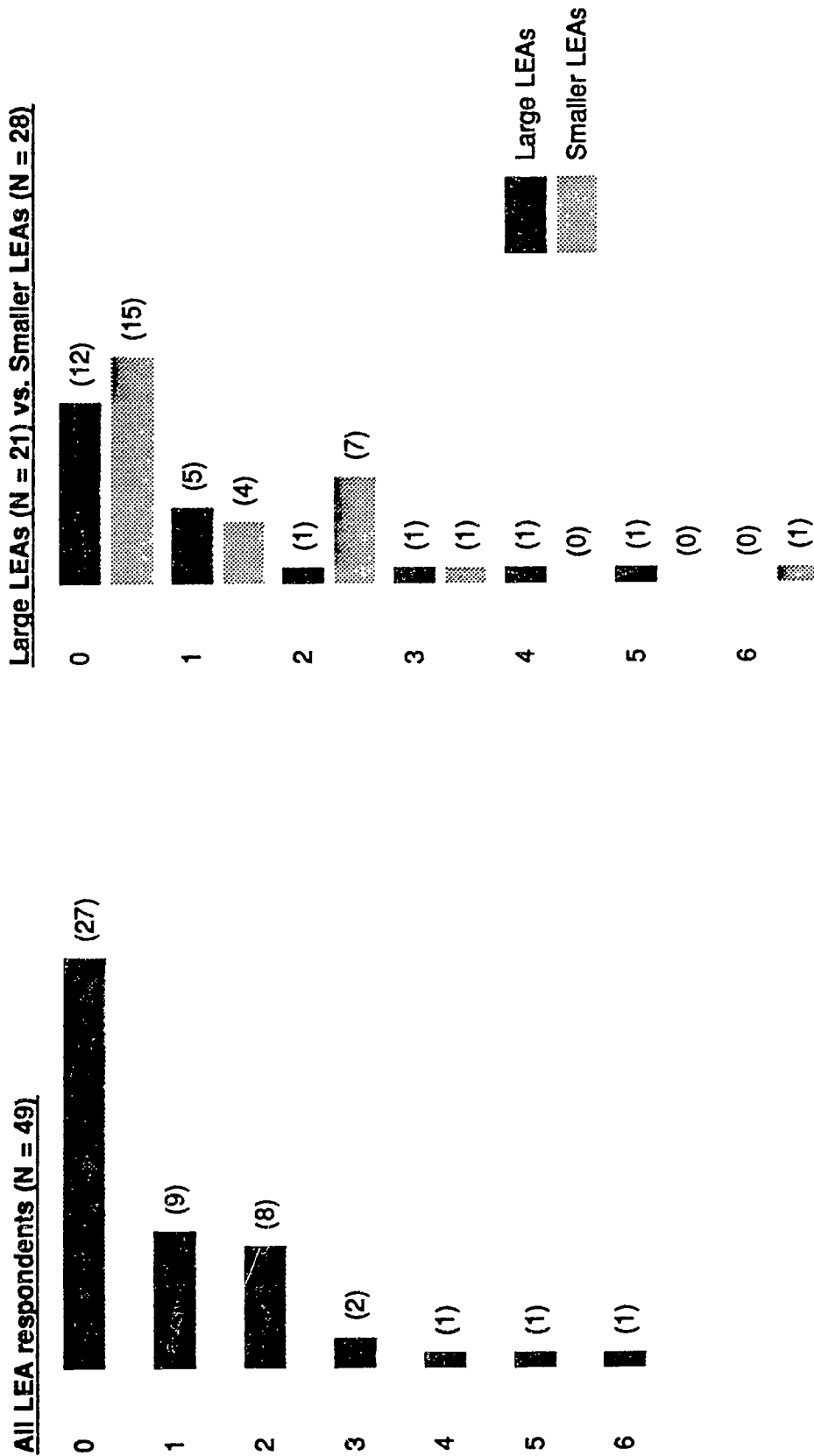
Table 2

Subjects In Which Performance Assessments Have Been Developed

Organizational affiliation	Read- ing	Math	Writing	Listen- ing	Speak- ing	Science	Social studies	Foreign language	Fine arts	Health	P.E.
College/univ.	1	1	2								
ESD											
LEA	8	5	18	2	4	3	2	1			1
Publisher	1	1	1	1	1	1	1				
SEA		1	2	1					1	1	1
Other	1	1	1	1	1	1	1				
Total	11	9	24	5	6	5	4	1	1	1	2

Figure 1

Number of Subjects in Which LEAs Have Developed Performance Assessments



Large LEAs are those with enrollment of 35,000 or more.

Mean number of subjects for all LEAs = .94

Mean number of subjects for large LEAs = .90

Mean number of subjects for smaller LEAs = .96

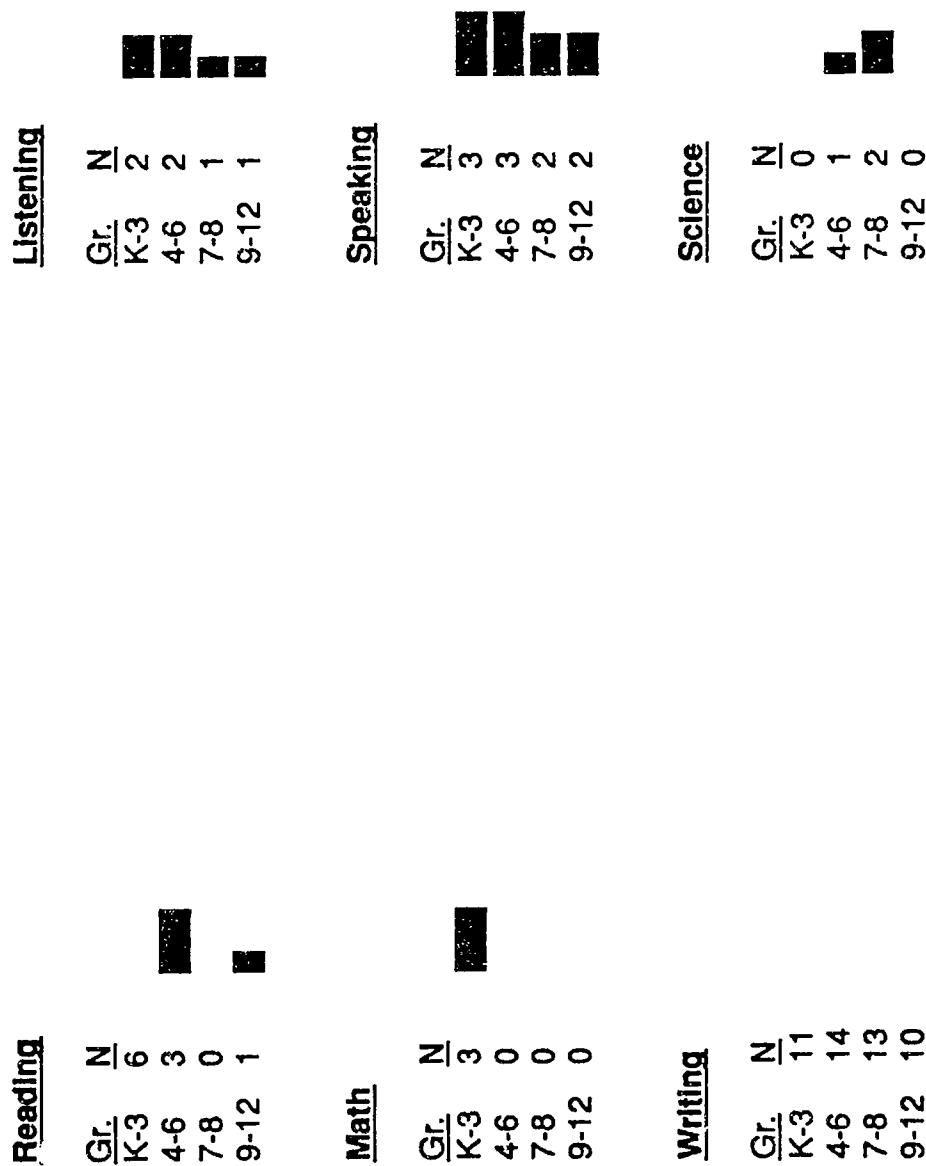
Mean number of subjects for all LEAs that have developed performance assessments = 2.09

Mean number of subjects for large LEAs that have developed performance assessments = 2.11

Mean number of subjects for smaller LEAs that have developed performance assessments = 2.08

Figure 2

Grade Levels for Which LEAs Developed Performance Assessments



Note: N should be interpreted as the number of LEAs developing a performance assessment at the grade level indicated. Some LEAs developed performance assessments at two or more grade levels and others did not indicate grade levels at all.

Table 3

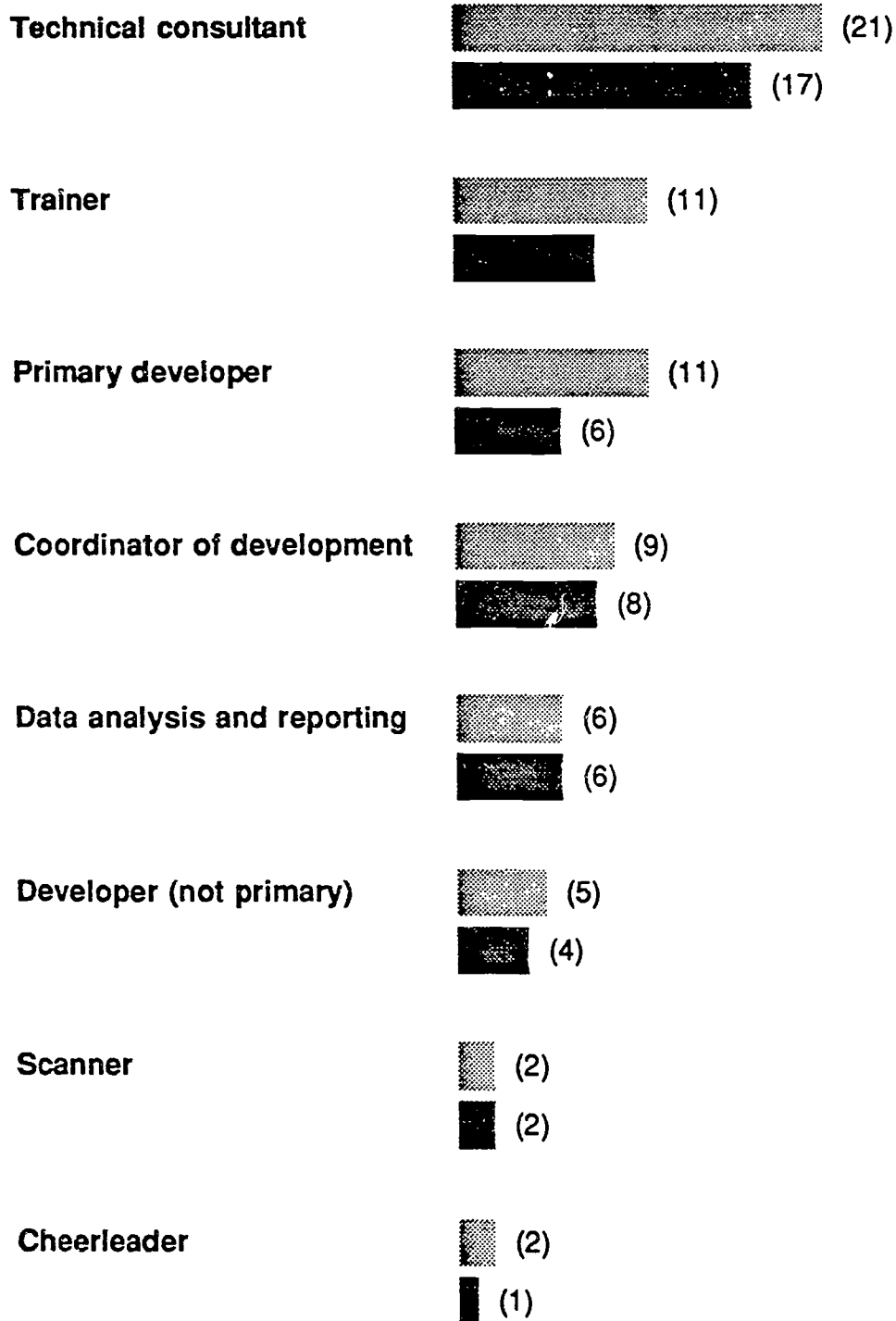
Frequencies of Reading, Mathematics, and Writing
Performance Assessment Development Reported by Large and Smaller LEAs

	N	N that have developed at least one performance assessment	N that have developed reading performance assessments	N that have developed math performance assessments	N that have developed writing performance assessments
Large LEAs (over 35,000 enrollment)	21	9 (42.9%)	2 (9.5%)	2 (9.5%)	9 (42.9%)
Smaller LEAs (under 35,000 enrollment)	28	13 (46.4%)	13 (46.4%)	6 (21.4%)	9 (32.1%)

Note: The differences between large and smaller LEAs were not statistically significant.

Figure 3

NATD Members' Roles with Regard to Performance Assessment Development





 All respondents (N = 30)
 LEA respondents (N = 23)

Table 4

Description of Scoring Rubrics Submitted

Subject	Grades	Type	No. of analytic scales	Analytic scales	No. of scale points	Comments
Writing	elementary	analytic	6	ideas and content, organization, voice, word choice, sentence structure, writing conventions	5	Based on rubric originally developed by Hillsboro School District in Beaverton, Oregon and refined by Northwest Regional Educational Laboratory; also included was a student self-assessment, "How am I Doing," from Spandel, V., & Stiggins, R. J. (1990). <i>Creating Writers: Linking Assessment and Writing Instruction</i> (pp. 99-100). New York: Longman.
Writing	7-12	holistic			6	Rubric is prompt-specific.
Writing	6	analytic	6	ideas and content, organization, voice, writing conventions, sentence fluency, word choice.	5	This rubric is used in the Nevada state writing assessment. It, too, appears to be based on the Beaverton, Oregon rubric.
Writing	4	holistic			6	
Writing	not specified	analytic	5	organization/format, content, writing conventions, research and interpret data/information, appropriate vocabulary	3	Rubric is for technical writing.
Writing	3-8	analytic and holistic	4	focus, support and elaboration, organization, conventions	4	Same scales as Illinois rubric, but different number of rating points.
Writing	1-2	analytic and holistic	3	focus, support and elaboration, conventions	4	Uses three of the four scales in the Illinois rubric, but a different number of rating points.
Writing	not specified	analytic	6	organization, voice, word choice, sentence fluency, conventions	5	Adapted from Beaverton, Oregon rubric.

Subject	Grades	Type	No. of analytic scales	Analytic scales	No. of scale points	Comments
Writing	8	analytic	3	rhetorical, coherence, conventions	7	Rubric for speculation about causes or effects.
Writing	3-8	analytic	2	rhetorical, conventions	7	Separate rubrics for story, firsthand biography, autobiographical incident, problem solution, reflective essay and observational writing. The rhetorical score functions essentially as a holistic score that does not take conventions into account.
Writing	4 and above	holistic			5	General rubric and additional guidelines for scoring essays and business letter.
Writing	1-6	analytic and holistic	4	organizational factors, content considerations, language and style considerations, mechanics	3	There seem to be two holistic scores, one on a 3-point scale (low, middle, high) and another on a 5-point scale.
Writing	3	analytic	10	focus on topic, supporting details, order, language variety, vocabulary, sentence structure, spelling, capitalization, use of periods, subject-verb agreement	5	Unusually detailed, especially with respect to conventions.
Writing	5	analytic	11	same as grade 3 immediately above, plus use of commas	5	Unusually detailed, especially with respect to conventions

Subject	Grades	Type	No. of analytic scales	Analytic scales	No. of scale points	Comments
Writing	8, 11	analytic	16	reasoning, specific details, related ideas, order, beginning/middle/end, paragraphing, sentence structure, expression, vocabulary, word usage, spelling, capitalization, punctuation, subject/verb agreement, pronoun agreement, verb tense	5	The rubrics for grades 8 and 11 differ somewhat, but the scales have the same titles. Much greater detail than most rubrics.
Writing	K-2	holistic			6	There is a separate conventions score (on a 0-3 scale) for grade 2. There are different rubrics for story, observational writing, and autobiographical incident.
Writing	primary	analytic and holistic	6	journal used regularly, fluency, detail and elaboration, variety, conventions, willingness to take risks and try new ideas	5	Rubric is used for scoring journals. It was not developed by the NATD member, but by local school staff.
Writing	primary	analytic	8	initiates own writing, chooses topics with confidence, produces meaningful writing, revises ideas when appropriate, edits mechanics when appropriate, requests meaningful help in writing, actively participates in peer and teacher writing conferences, shares own writing	2	Each attribute is rated as developing or effectively demonstrated. Rubric was not developed by the NATD member, but is used in one of the district's schools.

Subject	Grades	Type	No. of analytic scales	Analytic scales	No. of scale points	Comments
Writing	kinder-garten	analytic	6	begins to write without hesitation; seeks out opportunities to write; writes fluently with scribbles, letter strings and some invented spelling; believes s(he) has written thoughts or ideas on paper; students reads his/her message/story; writes first name independently	3	The score points are labelled "achieving," "developing," and "not yet." Scales are grouped into three categories: positive sense of self as a writer, records own thoughts on paper and reproduced own name. Positive attitude toward own writing is included on a grade report to parents.
Writing	1	analytic	5	identifies and uses some pre-writing strategies; rereads a recent draft with consistency of meaning; responds with positive comments to another child's shared writing; composes a draft of two or more thoughts on a topic using invented spelling but completely understood by writer; has a positive view of own writing	3	The score points are labelled "achieving," "developing," and "emerging." Scales are grouped into three categories: process, product and attitude. Scale scores are included on a grade report to parents.
Writing	2	analytic	7	focus, support, organization, complete sentences, capital letters, use of period, spelling appropriate for grade level	3	Loosely based on Illinois writing rubric.
Writing	4-8	analytic	6	ideas and content, organization, voice, word choice, sentence fluency, writing conventions	5	This LEA uses the rubric developed by the Beaverton, Oregon School District.

Subject	Grades	Type	No. of analytic scales	Analytic scales	No. of scale points	Comments
Writing	3-12	analytic and holistic	4	focus, support, organization, conventions	6	LEA uses Illinois writing rubric. There are separate rubrics for narrative, persuasive and expository writing.
Writing	5	analytic	2	rhetorical, conventions	4	Rhetorical score is somewhat similar to a holistic score, embodying completeness, coherence and organization.
Writing	2-12	analytic and holistic	5	personal expression/narrative content; personal expression/narrative organization; sentence construction; vocabulary and grammar; spelling and capitalization	5	Submitted by test publisher.
Reading	kinder-garten	analytic	5	concepts of print; concepts of books and how they work; concepts of story: how a story works; positive attitude toward own reading; recognizes words/logos of environmental print	3	The score points are labelled "not yet," "developing," and "achieving."

Subject	Grades	Type	No. of analytic scales	Analytic scales	No. of scale points	Comments
Reading	1	analytic	10	<p>chooses and enjoys books independently; analyzes picture book read to student; uses pictures and words to construct meaning; distinguishes whether story is realistic or fantasy; reads a fictional narrative fluently; names and matches all upper and lower case letters; recognizes 100-120 words by sight; recognizes sound/symbols for consonants and digraphs at beginning and end of word; sounds out 3-letter consonant-vowel-consonant pattern; uses context to identify an unknown word</p>	3	The score points are labelled "emerging," "developing," and "achieving."
Reading	primary	analytic	8	<p>Initiates own reading; chooses books with confidence; uses appropriate comprehension strategies to develop meaning; uses appropriate print cues to develop meaning; actively participates in reading discussion groups; writes effective responses to literature; shares own reading; reads content materials for his/her own grade level.</p>	2	Each attribute is rated as developing or effectively demonstrated. Rubric was not developed by the NATD member, but is used in one of the district's schools.

Subject	Grades	Type	No. of analytic scales	Analytic scales	No. of scale points	Comments
Reading	8, 12	holistic			5	Rubric is specific to the reading passage. Part of open-response released items and scoring rubrics published by the Kentucky Department of Education.
Reading	10	holistic			5	Rubric is for written response to literature; rubric deals with writing as well as reading.
Mathematics	kinder-garten	analytic	8	names 4 shapes; counts to 20; recognizes numeral names 0 to 10 in random order; knows number families for 4; counts out loud using 1:1 correspondence for a set of 12 objects; instantly recognizes sets of 1,2,3,4,5; sorts and classifies set by 2 attributes; measures length of an object	3	The score points are labelled "not yet," "developing," and "achieving."
Mathematics	1	analytic	23	[scales deal with to counting; estimating; using $<$, $=$ and $>$; problem solving; sorting and classifying; using patterns; graphs; estimating and measuring length; telling time; geometric figures	3	Score points are labelled "emerging," "developing," and "achieving."
Mathematics	1-2	analytic, holistic	3	understanding the problem, solving the problem, answering the problem	3	There are also problem-specific rubrics that assign 1 point each for addressing each part of a problem and a 4-point holistic scale that describes responses as exemplary, detailed, and clear; generally correct; partially correct but lacking in clarity; or no or incorrect response.

Subject	Grades	Type	No. of analytic scales	Analytic scales	No. of scale points	Comments
Mathematics	8, 12	holistic			4 (gr 8) 5 (gr 12)	These problem-specific rubrics are from the open-response released items and scoring rubrics published by the Kentucky Department of Education.
Listening	2, 7	analytic	4	literal, physical, critical, analytical	5	There are separate rubrics for the two grades.
Listening	3	holistic			3	Scores from 50 to 100 are mapped onto one of the three categories: student accurately identified meanings (90-100), student accurately identified meanings, but needed a teacher prompt to do so (75-79), and student could not accurately identify meanings (50-69).
Speaking	not specified	analytic	10	eye contact and facial expression; appropriate loudness; rate of speech; intonation; posture and body language; interesting beginning; enough facts and examples to "prove" point; good ending; answers questions confidently; use appropriate visual aids	5	The sum of the analytic scores yields an overall score, which falls into one of these categories: success, partial success, limited success.
Speaking	2,7	analytic	5	vocal delivery, physical delivery, language style, clarity of message, achieves a variety of purposes.	5	There are separate rubrics for grades 2 and 7.
Speaking	4	holistic			3	Scores from 50 to 100 are mapped onto one of the three categories.
Science	6	(see comment)			variable-problem specific	An overall score is computed by adding points accumulated by making predictions, observing/collecting data, measuring, and drawing conclusions.

Subject	Grades	Type	No. of analytic scales	Analytic scales	No. of scale points	Comments
Science	8,12	holistic			4 (gr 8) 5 (gr 12)	Grade 8 examples are problem-specific; grade 12 rubrics are more general. These rubrics are from the open-response released items and scoring rubrics published by the Kentucky Department of Education.